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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/082,967	02/25/2002	Roger Dahl	P-9367	7022

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MEDTRONIC, INC.
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EXAMINER

MULLEN, KRISTEN DROESCH

ART UNIT	PAPER NUMBER
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3762

DATE MAILED: 06/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/082,967

Applicant(s)

DAHL, ROGER

Examiner

Kristen Mullen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 6/9/05(RCE).
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-11, 14-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-11 and 14-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 February 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 6/9/05 has been entered.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1, 3-12 and 14-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Min et al. (5,690,686).

Regarding claim 1, Min et al. shows a method for defibrillating a heart, comprising placing a first electrode (23) into contact with a first portion of the heart proximate a superior vena cava; placing a second electrode (8) into contact with an interior wall of an oblique vein; and transmitting an electrical pulse between the first electrode and the second electrode in response to a determination that a cardiac event is detected (Col. 2, lines 36-40; Col. 8, lines 34-46, Fig. 1).

With respect to claim 11, Min et al. shows an apparatus comprising means (15) for placing a first electrode (23) into contact with a first portion of the heart proximate a superior vena cava; means (6) for placing a second electrode (8) into contact with a an interior wall of the oblique vein of the heart; and means for transmitting an electrical pulse between the first electrode and the second electrode in response to a determination that a cardiac event is detected (Col. 2, lines 36-40, Col. 8, lines 34-46, Fig. 1).

Regarding claims 3-4 and 14, Min et al. further shows a defibrillation waveform traveling between a location proximate the superior vena cava and the oblique vein in response to detection of atrial fibrillation (Col. 2, lines 36-40).

With respect to claims 5-6 and 15-16, Min et al. shows the method and means for transmitting the electrical pulse further comprises the method and means for transmitting a uniphasic or biphasic electrical pulse between the first electrode and the second electrode (Col. 9, lines 22-28).

With respect to claims 7 and 17, Min et al. shows the method and means (16) for placing a third electrode (20) into contact with a wall of a right ventricle of the heart; and transmitting an electrical pulse between the third electrode and at least one of the first and second electrodes if the heart is experiencing ventricular fibrillation (Col. 8, lines 34-46).

Regarding claim 8, Min et al. shows the method and means for sensing the heart for ventricular fibrillation (Col. 8, lines 34-46).

With respect to claims 9-10 and 19-20, Min et al. shows the method and means for transmitting the electrical pulse further comprises the method and means for transmitting a

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uniphasic or biphasic electrical pulse between the third electrode and at least one of the first and second electrodes (Col. 8, lines 34-46; Col. 9, lines 22-28).

4. Claims 1, 3-4, 7-8, 11, 14 and 17-18 are rejected under 35 U.S.C. 102(e) as being anticipated by Kroll (6,456,876).

Regarding claim 1, Kroll shows a method for defibrillating a heart comprising placing a first electrode (38) into contact with a first portion of the heart proximate a superior vena cava; placing a second electrode (48) into contact with an interior wall of an oblique vein; and transmitting an electrical pulse between the first electrode and the second electrode in response to a determination that a cardiac event is detected (Col. 4, line 66-Col. 5, line 1).

With respect to claim 11, Kroll shows an apparatus comprising means (30) for placing a first electrode (38) into contact with a first portion of the heart proximate a superior vena cava; means (46) for placing a second electrode (48) into contact with an interior wall of an oblique vein; and means for transmitting an electrical pulse between the first electrode and the second electrode in response to a determination that a cardiac event is detected (Col. 4, line 66-Col. 5, line 1).

Regarding claims 3-4, and 14, Kroll further shows a defibrillation waveform traveling between a location proximate the superior vena cava and the oblique vein in response to detection of atrial fibrillation (step 150, Fig. 2) (Col. 4, line 66-Col. 5, line 1).

With respect to claims 7, and 17, Kroll shows the method and means for placing a third electrode (36) into contact with a wall of a right ventricle of the heart; and transmitting an electrical pulse between the third electrode and at least one of the first and second electrodes if the heart is experiencing ventricular fibrillation (step 140, Fig. 2) (Col. 4, lines 57-65).

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Regarding claims 8, and 18, Kroll shows the method and means for sensing the heart for ventricular fibrillation (step 140, Fig. 2).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 5-6, 9-10, 15-16 and 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kroll (6,456,876) in view of Min et al. (5,690,686). Kroll is as explained before. Although Kroll fails to teach transmitting a uniphasic or biphasic electrical pulse between the first electrode and the second electrode and transmitting a uniphasic or biphasic electrical pulse between the third electrode and at least one of the first and second electrodes, attention is directed to Min et al. which teaches the transmission of biphasic or uniphasic electrical pulses between the first electrode and the second electrode, and between the third electrode and at least one of the first and second electrodes. It would have been an obvious design choice to one with ordinary skill in the art at the time of the invention to transmit biphasic or uniphasic electrical pulses between the first electrode and the second electrode, and between the third electrode and at least one of the first and second electrodes, since applicant has not disclosed that these particular waveforms provide any criticality and /or unexpected results and it appears that the invention would perform equally well with any waveform such as the waveform taught by Kroll.

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7. Claims 1, 3-4, 7-8, 11, 14 and 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Helland (2002/0103506) in view of Smits (6,556,873).

Regarding claims 1, 11 and 14, Helland shows a method comprising placing a first electrode (25) into contact with a first portion of the heart proximate a superior vena cava; placing a second electrode (35) into contact with a second portion of the heart and transmitting an electrical pulse between the first electrode and the second electrode in response to a determination that a cardiac event is detected (Figs. 2, 11-13). Helland shows the second electrode (35) is located within "a coronary sinus region" which can include "any other cardiac vein accessible by the coronary sinus" [0031]. Although Helland fails to specifically show "any other cardiac vein accessible by the coronary sinus" is the oblique vein, attention is directed to Smits which teaches locating a lead within the oblique vein can result in successful defibrillation of the left atrium (Col. 15, lines 1-3). Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify the "any other cardiac vein accessible by the coronary sinus" of Helland to include the oblique vein as Smits teaches in order to successfully defibrillate the left atrium.

Regarding claims 3-4, Helland further shows a defibrillation waveform traveling between locations proximate the superior vena cava and the oblique vein in response to detection of atrial fibrillation (Figs. 11-13; [0046-0048; 0055-0056; 0071-0075]).

Regarding claims 7-8 and 17-18, Helland shows placing a third electrode (24) into contact with a wall of a right ventricle and transmitting an electrical pulse between the third electrode and at least one of the first and second electrodes if the heart is experiencing ventricular fibrillation (Figs. 4-5, 8; [0046-0048; 0055-0056])

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8. Claims 5-6, 9-10, 15-16, and 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Helland (2002/0103506) in view of Smits (6,556,873), and further in view of Min et al. (5,690,686). Helland and Smits are as explained before. Although Helland and Smits fail to teach transmitting a uniphasic or biphasic electrical pulse between the first electrode and the second electrode and transmitting a uniphasic or biphasic electrical pulse between the third electrode and at least one of the first and second electrodes, attention is directed to Min et al. which teaches the transmission of biphasic or uniphasic electrical pulses between the first electrode and the second electrode, and between the third electrode and at least one of the first and second electrodes. It would have been an obvious design choice to one with ordinary skill in the art at the time of the invention to transmit biphasic or uniphasic electrical pulses between the first electrode and the second electrode, and between the third electrode and at least one of the first and second electrodes, since applicant has not disclosed that these particular waveforms provide any criticality and /or unexpected results and it appears that the invention would perform equally well with any waveform.

Response to Arguments

9. Applicants have amended “electrical contact” to read “contact”. Without an additional adjective to modify “contact”, it can be mean either electrical contact or physical contact. Thus the term “contact” is broader than “electrical contact”. Based on these findings, the examiner has included additional rejections (Helland and Smits) that address both electrical and physical contact. Applicants also raise issue with the examiners interpretation of “placing . . . into contact” asserting that the examiner is substituting “transmitting” for its meaning. The examiner believes that she is not substituting the definition of transmitting for the definition of physical

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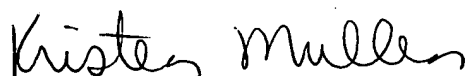
positioning. One can physically position an electrode into contact (electrical contact) with certain tissues. To avoid the disputes over the definition of the word "contact", applicants can amend the specification to explicitly define the meaning of "contact" as used in the claims. Applicants may amend the specification, so long as it does not constitute new matter. Such amendment to the specification will put the public on notice as to the intended scope of claims. Otherwise, applicants can amend the claims to include "physical contact", so long as this does not constitute new matter.

Conclusion

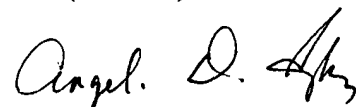
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kristen Mullen whose telephone number is (571) 272-4944. The examiner can normally be reached on M-F, 10:30 am-6:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Angela Sykes can be reached on (571) 272-4955. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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